

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 26 JUL 2005

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Applicant's or agent's file reference ZAP/PCT/MH		<b>FOR FURTHER ACTION</b>		See Form PCT/PEA/416
International application No. PCT/GB2004/001459		International filing date (day/month/year) 05.04.2004	Priority date (day/month/year) 04.04.2003	
International Patent Classification (IPC) or national classification and IPC H04N7/16				
Applicant THE ZAP CORPORATION (UK) LIMITED				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand  03.02.2005		Date of completion of this report  26.07.2005		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Dobbelaere, D  Telephone No. +49 89 2399-2019		



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/GB2004/001459

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-12 as originally filed

**Claims, Numbers**

1-10 received on 03.02.2005 with letter of 03.02.2005

**Drawings, Sheets**

1-4 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/GB2004/001459

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	2,4
	No: Claims	1,3,5-10
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/GB2004/001459

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1 Reference is made to the following documents:

D1: US 2002/129368 A1 (RAMPULLA ANDREW J ET AL) 12 September 2002 (2002-09-12)

D2: EP-A-1 207 695 (DISCOVERY COMMUNICAT INC) 22 May 2002 (2002-05-22)

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of independent claim 1 is not new in the sense of Article 33(2) PCT.

2.1 Document D1 discloses (while repeating the wording of present claim 1, the references in parentheses apply to D1):

A system for broadcasting inter-programme and/or intra-programme advertisements to a viewing or listening audience (Paragraph [0275]), characterised in that the system comprises:

- means for obtaining programme-receiving audience profiles (Abstract);
- means for matching a given advertisement's target audience profile to a given programme-receiving audience profile (Paragraph [0275]); and
- means for broadcasting advertisements dependent upon target audience profiles and programme-receiving audience profiles (Paragraphs [0129-0130], [0275]);

characterised in that:

- said means for obtaining programme-receiving audience profiles operate with means for interrogating set top boxes with individual ... addresses in order to determine the nature of the programmes viewed by the programme receiving audience per ... address or group of ... addresses (Paragraphs [0128], [0249], [0275];
- said means for broadcasting advertisements operate with means for analysing viewer habits for particular ... addresses in order to generate a programme-receiving profile for one or a group of ... addresses (Paragraphs [0120], [0130], [0075-0076], [0276-0279]);

and the system further comprises:

- means for dictating not only that certain advertisements shall be broadcast only between and/or during certain programmes but also that certain individual members of, or groups of members within, the programme-receiving audience may receive one advertisement during and/or between certain programmes, whilst other audience members or member groups receive a different advertisement, in one or more of the same respective advert 'slots', whilst watching or listening to the same broadcast (Paragraphs [0278], [0279]).

It may be argued that D1 does not explicitly mention the term 'IP' to qualify the address of the Set Top Box. In D1 however the different Set Top Boxes are also uniquely addressed (and thus need an address), and are also connected to the Internet (see e.g. paragraphs [0120] or [0279]). It is thus implicitly clear that the address used can just as well be an IP address.

D1 thus discloses in combination all features of present claim 1, consequently claim 1 cannot be considered novel over the available art (Art 33(2) PCT).

- 2.2 It could however also be argued that in D1 the viewer profile is generated and updated at the Set Top Box and then communicated to the central system, whereas the present application is directed to a fully centralised profiling system. It must first be noted however that present claim 1 is not limiting in this sense, i.e. there is no clear and restricting limitation in the disclosure of present claim 1 stating that the profiles are exclusively generated at the central side.

Moreover, even if there would be such a restriction, this would not be considered inventive (Art 33(3) PCT): the choice whether to charge the Set Top Box with the gathering and updating of the profile rather than doing this at the central system is a design choice, not a technical one: such a choice concerns a tradeoff in between cost/processing power at the user side versus cost/processing power at the central side, in between flexibility versus central control.

Since communication in between a Set Top Box and a central system over (any type of) a network is well known in the art, such processing functions can be moved into different nodes of the communication network without substantially changing the technical contribution.

- 2.3 It may furthermore be noted that some terminology and statements claim 1 in particular, are vague and unclear, or do not refer to any technical features, contrary to Art 6 PCT:

- the use of several '*and/or*' combinations in claim 1;
- the term '*programme-receiving ... profile*' is not clear and has no technical character.

**INTERNATIONAL PRELIMINARY  
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(SEPARATE SHEET)**

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**PCT/GB2004/001459**

- 3     Dependent claims 2-10 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1 and D2 (claims 2 and 4 in particular) and the corresponding passages cited in the search report.

## CLAIMS

1. A system for, broadcasting inter-programme and/or intra-programme advertisements to a viewing or listening audience which comprises:

- means for obtaining programme-receiving audience profiles;
- means for matching a given advertisement's target audience profile to a given programme-receiving audience profile; and
- means for broadcasting advertisements dependent upon target audience profiles and programme-receiving audience profiles;

characterised in that:

- said means for obtaining programme-receiving audience profiles operate with means for interrogating set top boxes with individual IP addresses in order to determine the nature of the programmes viewed by the programme receiving audience per IP address or group of IP addresses;
- said means for broadcasting advertisements operate with means for analysing viewer habits for particular IP addresses in order to generate a programme-receiving audience profile for one or a group of IP addresses; and the system further comprises:
  - means for dictating not only that certain advertisements shall be broadcast only between and/or during certain programmes but also that certain IP addresses or groups of IP addresses within the programme-receiving audience may receive one advertisement, during and/or between certain programmes, whilst other IP addresses or IP addresses groups receive a different advertisement, in one or more of the same respective advert 'slots', whilst watching or listening to the same broadcast;

2. A system according to claim 1, wherein the system collects data by using polling pulses and stores data for analysis in a data collector located remotely from the set top boxes.

3. A system according to either one of the preceding claims, wherein the system uses a bank of advertising campaigns where advertising campaigns are classified by integrating numerically tagged segment codes.

4. A system according to any of the preceding claims, comprising a first server for obtaining programme-receiving profiles and at least a second server containing tagged advertisements.

5. A system according to any of the preceding claims, comprising means for receiving multiple advertisements from a broadcast network and a mechanism for allowing the play-out of only a portion of the advertisements' broadcast whilst the remaining portion expires.

6. A system according to any of the preceding claims, wherein the system stores further information such as program buyer profile, time of broadcast and/or nature of broadcast and utilises an interface between the audience profiles data stored and said further information to select appropriate advertisements.

7. A system according to any of the preceding claims, wherein the system further comprises means allowing the viewer or listener to interact during an advertisement, means which store data as part of the audience profile to record any such interaction and means which may be set to trigger the release of further similarly classified advertisements to the viewer or listener.

8. A system according to any of the preceding claims, wherein during a given broadcast with a plurality of advertisement breaks, the system is adapted to record for an individual audience the series of advertisements delivered during an initial break and then adjust the content of the following series of advertisements delivered during a subsequent break.

9. A system according to any of the preceding claims, wherein during a given broadcast on a given channel with a plurality of advertisement breaks, the system is adapted to record for an individual audience whether the viewer switches to another channel during the break and the system comprises means to calculate which channel he or she is likely to switch to and tailor the advertisement delivered to said most probable channel to correspond to the audience in question.



10. A system according to any preceding claim, wherein the information identified such as the audience profiles is stored remotely from the viewer/listener receiver units.